



**Office Action Summary**

Application No.

09/107,618

Applicant(s)

BLUMENAU ET AL.

Examiner

Dung Dinh

Art Unit

2153

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are objected to by the Examiner.
- 11) ☒ The proposed drawing correction filed on 10 August 1999 is: a) ☒ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. § 119**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

**Attachment(s)**

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- 18) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: \_\_\_\_\_

DETAILED ACTION

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

*A person shall be entitled to a patent unless --*

*(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.*

*(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.*

Claims 1-2, 9, 15, 21-25 are rejected under 35

U.S.C. 102(b) as being anticipated by Sutton et al "PROCESSORS SHARING PARTITIONING OF MAIN STORAGE IN THE MP SYSTEM" - IBM TDB v.22 n5 Oct. 1979.

As per claim 1, Sutton teaches a data management method for managing access to a storage system by at least two devices (processors) comprising the steps of:

selectively servicing, at the storage system, a request from the devices responsive to configuration data ["storage configuration Control Array (BCA)"] indicating that a device is authorized to access portion of the data [see p.2009 2<sup>nd</sup> paragraph].

As per claim 2, Sutton teaches the request including source identifier (PRID), and an address to the volume in the storage system [range of storage addresses], determining whether to service the request responsive to a portion of the configuration data associated with the source identifier [see p.2009 2<sup>nd</sup> paragraph].

As per claim 9, Sutton teaches the device being a host processor (processor).

As per claim 15, Sutton teaches data structure to manage access by a plurality of device to volumes of data (address ranges) at a storage system, the data structure comprising a plurality of records corresponding to the plurality of device [see table 1 p.2009] and including configuration information identifying which of the volumes each device is authorized to access [see 2<sup>nd</sup> paragraph p.2009].

As per claim 21, it is rejected under similar rationale as for claim 15 above.

As per claim 22-25, they are rejected under similar rationale as for claim 2 above.

Claims 1-4, 9-11, 13, 14, 15-20, 21-27, 30-32 are rejected under 35 U.S.C. 102(e) as being anticipated by Wolff US patent 5,999,930.

As per claim 1, Wolff teaches a data management method for managing access to a storage system by at least two devices comprising the steps of:

selectively servicing, at the storage system [see col.6 lines 21-26, col.7 lines 13-29], a request from the devices [computer 54, 56] for access to a portion of data responsive to configuration data indicating that a device is authorized to access the portion of data [see col.8 lines 55-64].

As per claim 2, it is inherent that the request including source identifier (Client ID) and an address to the volume in the storage system, and determining whether to service the request responsive to the configuration data [see col.9, col.14 lines 62-68, col.15 lines 10-15].

As per claim 3, Wolff teaches the device and storage system are connected via a network [LAN].

As per claim 4, Wolff teaches using Fibre Channel protocol [col.6 lines 38-39].

As per claim 9, Wolff teaches the device being a host processor [computers].

Serial Number: 09/107,618  
Art Unit: 2757

-5-

As per claim 10, Wolff teaches the device being a file server [fig.2B].

As per claim 11, Wolff teaches a plurality of disk drives (RAID's, CD's).

As per claim 14, Wolff teaches servicing a first request accessing a first portion and preclude a second request access the first portion [apparent from col.8 lines 55-68].

As per claim 13, Wolff teaches using the address of the request as index into the configuration table [fig.3A & 3B - ID: "client A", "client B", "Client C"], and bitmap of the index record to determine access to the volume ["Logged On", "Lock Out", "Mount Access?", etc.].

As per claim 15, Wolff teaches a computer readable medium comprising:

a first data structure to manage access [access control table] by a plurality of devices to volumes of data at a storage system, the first data structure comprising a plurality of records corresponding to the plurality of devices [see fig.3A] (although fig.3A shows only one RAID, it is apparent the Wolff system could have a plurality of the RAID devices), each record includes configuration information identifying which of the

Serial Number: 09/107,618  
Art Unit: 2757

-6-

volumes of the storage system the one of the plurality of the devices is authorized to access [fig.3A LOCK OUT].

As per claim 16, Wolff teaches the readable medium is a memory of the storage system [fig.3B #206,208].

As per claims 17-18, Wolff teaches using Fibre Channel network [col.6 lines 38-39].

As per claims 19-20, Wolff teaches subrecords corresponding to subset of the storage system [see fig.3B].

As per claims 21-22, they are rejected under similar rationale as for claims 1-2 above.

As per claim 23, Wolff teaches precludes request from device that is not authorized to access [apparent from col.8 lines 60-68].

As per claims 24-25, it is rejected under similar rationale as for claim 13 above.

As per claims 26-27, they are rejected under similar rationales as for claims 3-4 above.

As per claims 30-32, they are rejected under similar rationales as for claims 9-11 above.

Serial Number: 09/107,618  
Art Unit: 2757

-7-

The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

*(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.*

Claims 5-8, 28-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wolff US patent 5,999,930 and further in view of Russel US patent 5,455,953.

As per claim 5, Wolff does not specifically disclose authenticating the request. Russel teaches a method for authorizing access right and authenticating request to resource over a network [col.3 lines 35-50]. One of ordinary skill in the art would have motivate to use the authentication method of Russel with the storage system of Wolff because it would have improve the security of the system and prevent unauthorized access.

As per claims 6-8, Russel teaches authenticating by comparing identifiers and encrypted key [col.3 lines 41-50].

As per claims 12, 28, 29, they are rejected under similar rationale as for claim 5 above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dung Dinh



Serial Number: 09/107,618  
Art Unit: 2757

-8-

whose telephone number is (703) 305-9655. The examiner can normally be reached on Monday-Thursday from 7:00 AM - 4:30 PM. The examiner can also be reached on alternate Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton Burgess can be reached at (703) 305-4792.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, DC 20231

**or faxed to:**

(703) 308-9051, (for formal communications intended for entry)

(703) 305-9731 (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA, Sixth Floor (Receptionist).



Dung Dinh  
Primary Examiner  
January 8, 2001